

DERWENT-ACC-NO: 1997-054544

DERWENT-WEEK: 200219

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TITLE: Current generation system for IC engine motor vehicle - has fuel cell system for generating electrical power for operating electrical loads and device for separating hydrogen from engine fuel with splitting system and hydrogen separation system

INVENTOR: ABERSFELDER, G; BUCHNER, H

PATENT-ASSIGNEE: DAIMLERCHRYSLER AG[DAIM] , MERCEDES-BENZ AG[DAIM]

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PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	
PAGES	MAIN-IPC		
EP 751045 A2	January 2, 1997	G	006
B60R 016/02			
US 6346340 B1	February 12, 2002	N/A	000
H01M 008/02			
DE 19523109 A1	January 9, 1997	N/A	007

B60R 016/04				
DE 29522067 U1	September 9, 1999	N/A	000	
B60R 016/04				
US 6210822 B1	April 3, 2001	N/A	000	
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DE 19523109 C2	October 11, 2001	N/A	000	
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APPLICATION-DATA:

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EP 751045A2	N/A	1996EP-0107325	May
9, 1996			
US 6346340B1	N/A	1996US-0672065	
June 26, 1996			
DE 19523109A1	N/A	1995DE-1023109	
June 26, 1995			
DE 29522067U1	Application no.	1995DE-1023109	
June 26, 1995			
DE 29522067U1	N/A	1995DE-2022067	
June 26, 1995			
US 6210822B1	Div ex	1996US-0672065	
June 26, 1996			
US 6210822B1	N/A	2000US-0482055	
January 13, 2000			
DE 19523109C2	N/A	1995DE-1023109	
June 26, 1995			

INT-CL (IPC): B60K025/08, B60R016/02 , B60R016/04 ,
H01M008/02 ,
H01M008/06 , H02K007/18

ABSTRACTED-PUB-NO: EP 751045A

BASIC-ABSTRACT:

The system contains e.g. a H₂/O₂ fuel cell system (4) such as PEM-cell with a proton-conducting membrane, for generating electrical power for operating electrical loads (5) instead of a conventional generator, but other types of fuel-cell could be used instead. It contains a device (10,11) for separating hydrogen from the fuel used to operate the internal combustion engine, a pipe line (12) for delivering the hydrogen to the fuel cell system and a disposal line (15) for delivering the residual fuel constituents to the engine (1) and/or to a fuel tank (2).

The hydrogen separating system consists of a splitting system (10) and a hydrogen separation system (11). In the splitting system the fuel is split into hydrogen and a residual gas. In the hydrogen separating system the

hydrogen is separated from the remaining fuel components.

ADVANTAGE - Current for electrical loads is provided with reduced fuel consumption and independently of the instantaneous engine revs. rate.

ABSTRACTED-PUB-NO: US 6210822B

EQUIVALENT-ABSTRACTS:

The system contains e.g. a H₂/O₂ fuel cell system (4) such as PEM-cell with a proton-conducting membrane, for generating electrical power for operating electrical loads (5) instead of a conventional generator, but other types of fuel-cell could be used instead. It contains a device (10,11) for separating hydrogen from the fuel used to operate the internal combustion engine, a pipe line (12) for delivering the hydrogen to the fuel cell system and a disposal line (15) for delivering the residual fuel constituents to the engine (1) and/or to a fuel tank (2).

The hydrogen separating system consists of a splitting system (10) and a hydrogen separation system (11). In the splitting system the fuel is split into hydrogen and a residual gas. In the hydrogen separating

system the hydrogen is separated from the remaining fuel components.

ADVANTAGE - Current for electrical loads is provided with reduced fuel consumption and independently of the instantaneous engine revs. rate.

US 6346340B

The system contains e.g. a H₂/O₂ fuel cell system (4) such as PEM-cell with a proton-conducting membrane, for generating electrical power for operating electrical loads (5) instead of a conventional generator, but other types of fuel-cell could be used instead. It contains a device (10,11) for separating hydrogen from the fuel used to operate the internal combustion engine, a pipe line (12) for delivering the hydrogen to the fuel cell system and a disposal line (15) for delivering the residual fuel constituents to the engine (1) and/or to a fuel tank (2).

The hydrogen separating system consists of a splitting system (10) and a hydrogen separation system (11). In the splitting system the fuel is split into hydrogen and a residual gas. In the hydrogen separating system the

hydrogen is separated from the remaining fuel components.

ADVANTAGE - Current for electrical loads is provided with reduced fuel consumption and independently of the instantaneous engine revs. rate.

CHOSEN-DRAWING: Dwg.1/1

TITLE-TERMS: CURRENT GENERATE SYSTEM IC ENGINE
MOTOR VEHICLE FUEL CELL SYSTEM

GENERATE ELECTRIC POWER OPERATE ELECTRIC
LOAD DEVICE SEPARATE
HYDROGEN ENGINE FUEL SPLIT SYSTEM
HYDROGEN SEPARATE SYSTEM

DERWENT-CLASS: Q13 Q17 X22

EPI-CODES: X22-F03;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N1997-044731